New Brunswick Economic Statistics

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September 1968
Office Of The
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NEW BRUNSWICK ECONOMIC STATISTICS

September, 1968

Office of the
Economic Advisor

Article:
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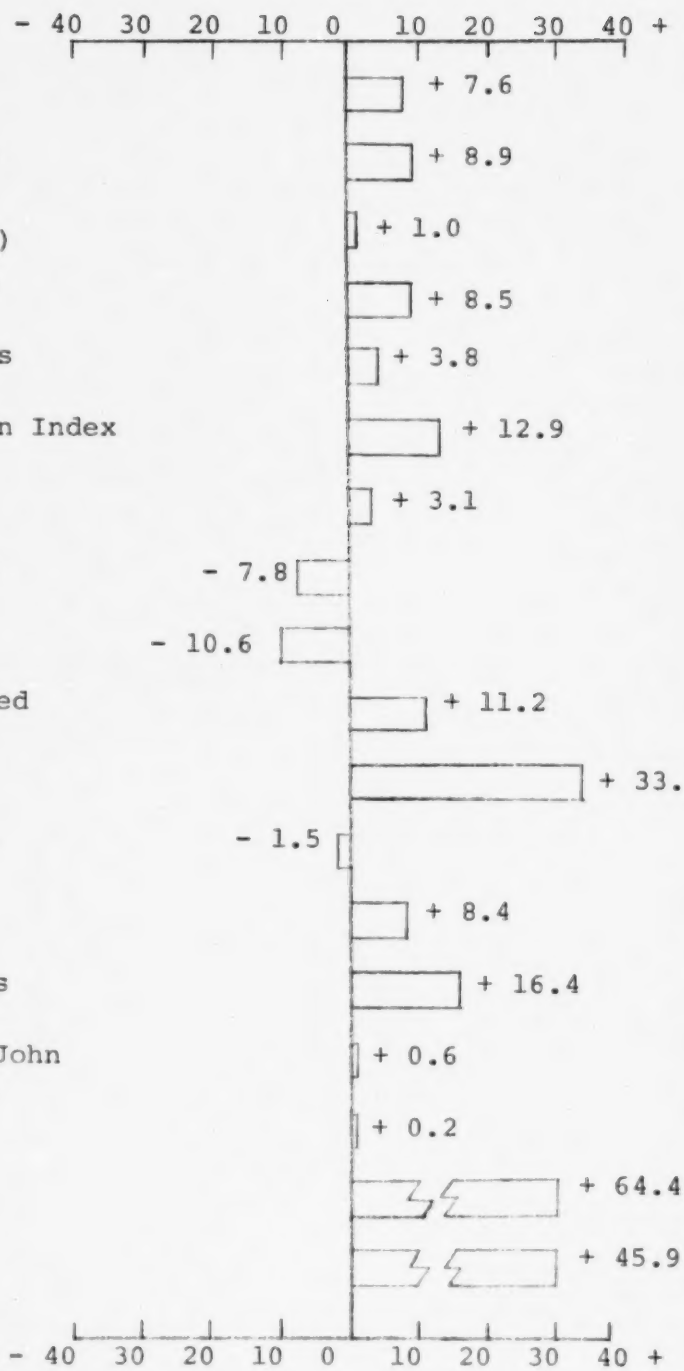
SELECTED ECONOMIC INDICATORS
NEW BRUNSWICK

Percentage Change 68/67
(except GPP)

Period	Economic Indicator	
67/66	GPP Estimate	+ 7.6
Jan.-June	Total Wages & Salaries	+ 8.9
Jan.-June	Employment Index (seasonally adjusted)	+ 1.0
Jan.-June	Unemployment Insurance Benefits Payments	+ 8.5
Jan.-July	Manufacturing Shipments	+ 3.8
2Q./2Q.	Pulp & Paper Production Index	+ 12.9
Jan.-July	Pulpwood Production	+ 3.1
Jan.-July	Sawn Lumber Production	- 7.8
Jan.-June	Coal Production	- 10.6
Jan.-July	Net Electric Energy Used	+ 11.2
Jan.-May	Building Permits	+ 33.2
Jan.-Aug.	Construction Contracts	- 1.5
Jan.-July	Retail Trade	+ 8.4
Jan.-July	New Motor Vehicle Sales	+ 16.4
Jan.-Aug.	Port Traffic at Saint John	+ 0.6
Jan.-June	Cheques Cashed	+ 0.2
Jan.-June	Fish Landings (Volume)	+ 64.4
Jan.-June	Fish Landings (Value)	+ 45.9



THE NEW BRUNSWICK ECONOMY

SUMMARY

The New Brunswick economy gave definite indications of moving decisively ahead during the first three quarters of 1968. A particularly good performance was turned in by the primary sector with substantial increases in agricultural, fishing mining and to a lesser extent forestry production. Retail trade, motor vehicle sales and life insurance sales all indicate that there has been a significant increase in business activity thus far this year. Residential construction has been strong in 1968 reflecting the greater availability of mortgage funds.

Preliminary estimates show the Gross Provincial Product to be about 7% higher than 1967. Price increases will probably form half of this growth.

The Provincial population is estimated to be 624,000 during June of this year, up 0.6% from June of last year.

The incomes of New Brunswicker's continue to increase faster than prices. The total of wages and salaries increased 8.9% and the average of weekly wages and salaries increased 5.3% during the first half of 1968 over the comparable 1967 period.

Higher incomes are reflected in substantially increased business activity. Retail trade after seven months of 1968 was up 8.4% in value over the same seven month period last year. The number of new motor vehicle sales has shown a similar trend having increased 16.4% in the same January-July period. Life insurance sales were up 11.8% during the first seven months of 1968 over the comparable period last year. Total cheques cashed in clearing houses was up only slightly, having increased 0.2% during the first half of 1968.

Residential construction is showing definite signs of improvement after two years of marking time. Housing starts in the first half of 1968 are up 5.2% from the first half of 1967. The value of building permits reflected an acceleration of building activity, having increased 33.2% or $4.9 million in the first five months of 1968. The value of construction contracts awarded is down 1.5% overall in the January-August period with the decline concentrated in the industrial and engineering sectors, while substantial increases were recorded in the residential, business and institutional sectors.

The agricultural sector is showing definite signs of improvement after two years of relative decline caused by poor crops in some cases and low prices in others. Farm cash receipts during the first half were up 7.7% over the comparable 1967 period. The outlook for the remainder of 1968 and early 1969 is good. Potato prices in particular are expected to be higher than in recent years.

The best performer in the primary sector has been the fishing industry. Although the catch of most species is up, the Queen Crab, herring and lobster merit special attention. Whereas there were three vessels fishing the Queen Crab at the end of the 1967 season there were fifty-five vessels fishing Queen Crab in the current season. These vessels were formerly fishing ground-fish, which is a low value species, and have turned to fishing crab, a high value species. The herring catch is also up substantially over last year due to a large number of seiners in operation. This year marked a return to normal in the lobster fishery after the difficult ice conditions experienced during the spring season of last year. The cumulative result of these events has been that over the first half of 1968 the volume and value of fish landings increased 64.4% and 45.9%, respectively, from the comparable 1967 period. The volume of the lobster catch was up 24.3% and the value of the lobster catch 25.5% over the same interval. The outlook for the remainder of the year is for a continuation of the improving trend.

There are few statistics available for mineral production but it is estimated that 1968 will show a 2% to 3% increase from the 1967 level of $92.1 million. This increase is relatively lower than has been experienced in recent years and can be attributed to lower metal prices. Coal production, due to mine closures at Minto, declined 10.6% during the first half of 1968.

In the forestry sector, pulpwood production increased 3.1% in the January-July period of 1968 over the comparable 1967 period. It is likely that the pace will pick up during the latter part of the year as the carryover from 1967 stocks is worked off. No statistics are available for sawlog production but it is expected to have decreased slightly as a result of lower sawn lumber production.

The value of manufacturing shipments, the overall indicator of manufacturing production, increased 3.8% during the January-July period of 1968 over the comparable 1967 period. A significant improvement occurred in the pulp and paper industry, as indicated by a 12.9% increase in the production index during the second quarter of the year. This can be largely attributed to fewer production snags, particularly in evidence during 1967. Sawn lumber production decreased 7.8% during the January-July period, reflecting poor conditions in the overseas market. However, it is expected that increased housebuilding may spur the domestic market and at least partially offset decreased demand for lumber on world markets. The outlook for manufacturing during the remainder of 1968 is for an increase in production only slightly in excess of price increases.

Unemployment continues to plague the Provincial economy, just as in the nation as a whole. During the first nine months of 1968 the Provincial labour force increased 2.8% while employment

increased only 2.6%. The result is an increase of 5.3% in the number of unemployed and a slight increase in the unemployment rate from 7.3% to 7.5%. Unemployment insurance benefits payments increased 8.5% during the first two quarters of 1968.

The Mid-year review of capital investment intentions resulted in a downward revision of 4.7% in the previous 1968 estimate of $439.4 million. The level of capital investment is now at the stage where it is neither an impetus nor a drag on the economy. Most of the decrease can be attributed to declining expenditures on such major construction projects as the Mactaquac Dam and the Saint John Harbour Bridge.

The utilities sector experienced increases in both electric energy production and consumption during 1968. Net electric energy used was up 11.2%, January-July while net electricity produced for consumption by the NBEPC was up 8.4%. The number of telephones increased 5.7%, long distance calls were up 8.8%.

Activity at the port of Saint John has picked up slightly during the first eight months. Incoming traffic was up by 16.1%, outgoing traffic was down by 16.7%. Overall, there was an increase of 0.6%.

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(I) POPULATION AND VITAL STATISTICS

Table 1 - Population
(thousands)

Month	1965	1966	1967	1968
January	n.a.	616,000	618,000	623,000
April	n.a.	616,000	619,000	624,000
June	615,000	617,000	620,000	624,000
July	n.a.	617,000	621,000	
October	n.a.	617,000	623,000	
% change				
(June/June)		(+0.3)	(+0.5)	(+0.6)

Source: D.B.S. 11-003.

Table 2 - Marriages
(number)

Month	1965	1966	1967	1968
January	188	177	362	258
February	239	221	215	174
March	163	148	167	249
April	282	379	365	294
May	386	367	416	426
June	432	518	414	459
July	753	812	952	651
August	646	638	690	778
September	530	556	797	
October	518	576	496	
November	372	393	387	
December	257	380	306	
Total	4,766	5,165	5,567	
% change (Jan.-Aug.)	(+5.5)	(+5.5)	(+9.8)	(-8.2)

Sources: D.B.S. 11-003 & 84-202.

Table 3 - Births
(number)

Month	1965	1966	1967	1968
January	1,165	1,050	1,215	1,145
February	1,119	1,017	851	844
March	1,241	1,094	1,017	1,084
April	1,199	1,073	1,290	963
May	1,225	1,144	1,240	1,129
June	1,245	1,066	969	946
July	1,233	1,050	1,316	965
August	1,264	1,138	943	915
September	1,153	1,155	1,221	
October	1,168	968	917	
November	1,050	953	925	
December	1,113	1,014	882	
Total	14,175	12,722	12,786	
% change (Jan.-Aug.)	(-6.0)	(-10.9)	(+2.4)	(-9.6)

Sources: D.B.S. 11-003 & 84-202.

Table 4 - Deaths
(number)

Month	1965	1966	1967	1968
January	393	391	453	506
February	363	381	400	427
March	392	392	395	500
April	439	412	427	362
May	397	426	453	464
June	369	373	363	370
July	377	368	483	303
August	414	412	367	359
September	405	375	477	
October	417	416	402	
November	387	412	376	
December	357	413	408	
Total	4,710	4,771	5,004	
% change (Jan.-Aug.)	(+0.4)	(+0.3)	(+5.9)	(-1.5)

Sources: D.B.S. 11-003 & 84-202.

(II) LABOUR

Table 5 - Total Wages and Salaries*
(million dollars)

Month	1965	1966	1967	1968
January	39.6	45.5	49.9	53.8
February	40.1	45.5	49.3	53.3
March	40.5	45.9	49.7	54.1
April	39.5	46.9	49.2	54.6
May	42.3	48.6	50.8	56.3
June	44.2	51.7	54.9	58.6
July	44.7	51.7	55.6	
August	45.8	50.9	56.1	
September	47.5	51.0	57.0	
October	46.6	51.3	56.6	
November	46.2	51.0	55.1	
December	44.6	49.8	53.7	
Total	521.6	589.8	637.9	
% change (Jan.-June)	(+10.2)	(+15.4)	(+6.9)	(+8.9)

Source: D.B.S. 72-005.
*Covers only firms with 20 or more employees.

Table 6 - Average Weekly Wages and Salaries*
(dollars)

Month	1965	1966	1967	1968
January	74.76	78.99	84.93	90.96
February	76.63	80.51	85.71	91.04
March	76.30	79.87	86.48	91.36
April	74.99	80.93	86.28	89.40
May	73.21	78.94	83.09	87.19
June	72.57	78.71	84.43	88.02
July	73.78	80.35	83.93	
August	73.26	72.40	84.23	
September	75.08	79.76	86.06	
October	76.13	79.77	86.59	
November	75.57	80.60	85.85	
December	74.85	80.30	85.68	
Average	74.76	79.26	85.27	
% change (Jan.-June)	(+6.0)	(+6.6)	(+6.9)	(+5.3)

Sources: D.B.S. 72-001 & 72-002.
*Covers only firms with 20 or more employees.

Table 7 - Employment Index (seasonally adjusted)*
(1961 = 100)

Month	1965	1966	1967	1968
January	105.2	113.6	116.0	114.4
February	106.0	113.2	114.5	114.2
March	107.7	114.7	115.0	116.5
April	108.2	119.0	116.5	120.1
May	108.6	116.4	114.6	119.0
June	109.2	117.5	115.9	115.3
July	111.4	116.8	118.7	
August	111.1	114.9	118.4	
September	111.2	113.2	118.1	
October	111.5	113.9	117.9	
November	113.1	114.1	116.1	
December	111.9	115.5	116.0	
Average	109.7	115.2	116.5	
% change (Jan.-June)	(+3.5)	(+7.7)	(-0.3)	(+1.0)

Source: D.B.S. 72-002.
*Covers only firms with 20 or more employees.

Table 8 - Unemployment Insurance Benefits Payments
(thousand dollars)

Month	1965	1966	1967	1968
January	2,197	2,041	2,114	2,775
February	2,524	2,630	2,420	3,225
March	3,528	2,858	3,120	3,022
April	2,291	2,424	3,167	2,914
May	1,989	1,736	2,243	2,248
June	759	593	681	724
July	446	554	593	
August	401	484	480	
September	391	486	422	
October	358	594	510	
November	541	668	616	
December	1,145	1,134	1,021	
Total	16,570	16,202	17,387	
% change (Jan.-June)	(+0.2)	(-7.6)	(+11.9)	(+8.5)

Source: D.B.S. 73-001.

Table 9 - Labour Force, Employment and Unemployment
(thousands)

Month	Labour Force			Employment			Unemployment			Unemployment Rate		
	1966	1967	1968	1966	1967	1968	1966	1967	1968	1966	1967	1968
January	198	193	200	178	175	178	20	18	22	10.1	9.3	11.0
February	200	193	196	176	171	176	24	22	20	12.0	11.4	10.2
March	201	194	197	177	172	174	24	22	23	11.9	11.3	11.7
April	199	195	201	180	173	179	19	22	22	9.5	11.3	10.9
May	203	199	208	188	185	196	15	14	12	7.4	7.0	5.8
June	205	206	214	197	197	204	8	9	10	3.9	4.4	4.7
July	213	217	221	204	208	211	9	9	10	4.2	4.1	4.5
August	216	216	220	209	208	210	7	8	10	3.2	3.7	4.5
September	205	210	217	197	203	208	8	7	9	3.9	3.3	4.1
October	203	211		194	203		9	8		4.4	3.8	
November	201	208		192	196		9	12		4.5	5.8	
December	200	205		187	191		13	14		6.5	6.8	
Average	204	204		190	190		14	14		6.8	6.8	
% change (Jan.-Sept.)	(+2.3)	(-0.9)	(+2.8)	(+3.7)	(-0.8)	(+2.6)	(-13.0)	(-2.2)	(+5.3)	(-15.9)	(-0.5)	(+2.4)

Source: D.B.S. 71-001.

(III) PRIMARY INDUSTRY

Table 10 - Farm Cash Receipts From Farming Operations
(thousand dollars)

Quarter	1965	1966	1967	1968
1st Quarter	15,456	13,978	11,201	11,070
2nd Quarter	17,070	14,572	10,776	12,610
3rd Quarter	12,186	11,927	13,305	
4th Quarter	15,681	13,283	13,545	
Total	60,393	53,760	48,827	
% change (1Q.-2Q.)	(+50.4)	(-12.2)	(-23.0)	(+7.7)

Source: D.B.S. 21-001.

Table 11 - Sources of Farm Cash Receipts
(thousand dollars)

	1965	1966	1967
(A) Field Crops			
Potatoes	25,788	16,072	10,260
Fruits	1,573	2,121	2,114
Vegetables	1,083	1,217	1,101
Oats	306	298	276
Other Crops*	1,352	1,140	1,002
Sub-total	30,102	20,848	14,753
(B) Livestock and Livestock Products			
Dairy Products	11,443	11,394	11,610
Cattle and Calves	7,315	7,966	7,637
Eggs	3,654	4,191	3,539
Hogs	3,093	3,363	2,731
Poultry	2,382	3,210	3,384
Sheep and Lambs	255	216	188
Other	469	475	494
Sub-total	28,611	30,815	29,583
(C) Forest and Maple Products	1,402	1,400	1,427

Source: D.B.S. 21-001.

*Receipts from the sale of tobacco are included with "other crops" because less than three firms reporting.

Table 12 - Pulpwood Production-Domestic Use
(thousand cunits)

Month	1965	1966	1967	1968
January	48.4	46.3	90.5	84.9
February	66.1	30.7	63.9	69.2
March	31.3	30.6	67.1	44.5
April	18.3	25.9	34.5	15.6
May	62.4	26.5	51.7	75.3
June	114.1	162.8	146.5	197.0
July	144.3	150.7	217.8	206.5
August	120.3	125.5	200.9	
September	140.3	140.8	167.2	
October	95.4	172.5	107.4	
November	84.5	131.8	149.9	
December	73.7	113.7	155.5	
Total	999.1	1,157.8	1,452.9	
% change (Jan-July)	(-4.2)	(-2.4)	(+41.9)	(+3.1)

Source: D.B.S. 25-001.

Table 13 - Coal Production
(thousand tons)

Month	1965	1966	1967	1968
January	78.5	80.2	78.7	70.9
February	78.6	73.4	57.2	63.5
March	82.4	72.5	76.3	61.2
April	81.4	67.1	72.1	58.4
May	81.6	69.1	64.4	63.2
June	78.6	61.1	71.4	58.5
July	74.4	66.2	67.8	
August	84.3	85.4	83.6	
September	86.1	90.0	70.7	
October	92.8	81.4	69.2	
November	89.3	80.4	65.0	
December	88.4	71.5	61.5	
Total	996.4	898.3	837.9	
Strip	853.1	752.8	716.5	
Shaft	143.2	145.7	121.2	
% change (Jan.-June)	(+1.9)	(-12.0)	(-0.8)	(-10.6)

Source: D.B.S. 45-002.

Table 14 - Volume of Fish Landings
(thousand pounds)

Month	1965	1966	1967	1968
January	8,255	1,853	4,640	2,940
February	3,968	1,840	12,775	11,672
March	6,965	4,967	579	18,664
April	3,890	11,003	7,334	16,344
May	45,838	34,326	20,307	43,785
June	34,917	35,235	32,309	34,708
July	37,004	54,409	79,895	
August	46,931	46,130	56,070	
September	43,563	62,095	52,412	
October	33,567	49,610	29,792	
November	15,862	11,315	28,434	
December	10,077	33,455	30,796	
Total	290,837	346,238	355,343	
% change (Jan.-June)	(+22.3)	(-14.1)	(-12.6)	(+64.4)

Source: D.B.S. 24-002 and N.B. Department of Fisheries.

Table 15 - Value of Fish Landings
(thousand dollars)

Month	1965	1966	1967	1968
January	233	98	149	100
February	165	119	279	259
March	183	139	25	346
April	164	317	177	352
May	1,501	1,227	843	1,594
June	1,735	1,543	1,558	1,771
July	1,103	1,702	2,394	
August	2,117	1,661	1,443	
September	1,298	1,740	1,487	
October	923	1,103	1,107	
November	683	733	780	
December	443	613	610	
Total	10,548	10,995	10,852	
% change (Jan.-June)	(+15.1)	(-13.5)	(-12.0)	(+45.9)

Source: D.B.S. 24-002 and N.B. Department of Fisheries.

Table 16 - Volume of Lobster Catch*
(thousand pounds)

Month	1965	1966	1967	1968
January	33	19	21	7
February	11	6	4	5
March	12	4	2	1
April	37	40	14	9
May	1,233	1,148	713	1,360
June	1,138	1,009	1,203	1,051
July	95	434	611	
August	1,832	1,404	705	
September	802	977	907	
October	285	376	533	
November	382	444	282	
December	253	258	172	
Total	6,113	6,119	5,167	
% change (Jan.-June)	(-4.8)	(-9.7)	(-12.1)	(+24.3)

Source: D.B.S. 24-002 and N.B. Department of Fisheries.
*Lobsters are also included in the Fish Landings series.

Table 17 - Value of Lobster Catch*
(thousand dollars)

Month	1965	1966	1967	1968
January	30	18	16	7
February	12	6	4	6
March	13	4	2	1
April	31	28	14	9
May	720	618	445	828
June	694	571	723	660
July	59	238	371	
August	1,031	730	443	
September	457	511	588	
October	161	196	350	
November	335	332	227	
December	233	193	148	
Total	3,776	3,445	3,331	
% change (Jan.-June)	(+4.7)	(-17.0)	(-3.3)	(+25.5)

Source: D.B.S. 24-002 and N.B. Department of Fisheries.
*Lobsters are also included in the Fish Landings series.

(IV) MANUFACTURING

Table 18 - Gross Value of Manufacturing Shipments
(thousand dollars)

Month	1965	1966	1967	1968
January	34,344	37,727	41,396	42,961
February	35,240	38,214	39,437	42,257
March	43,794	40,813	44,112	44,071
April	41,909	39,726	42,258	44,762
May	41,928	45,752	46,983	51,747
June	49,389	50,867	50,870	50,533
July	44,962	54,580	49,173	49,700p
August	46,796	50,548	49,187	
September	46,776	46,299	47,972	
October	43,741	44,182	48,265	
November	43,339	44,825	48,344	
December	41,509	44,206	43,225	
Total	513,727	537,739	551,222	
% change (Jan.-July)	(+1.4)	(+5.5)	(+2.1)	(+3.8)

Source: D.B.S. 31-001.

Table 19 - Pulp and Paper Production Index
(1953 Quarterly Average = 100)

Quarter	1965	1966	1967	1968
1st Quarter	166.0	177.9	187.4	183.7
2nd Quarter	172.0	185.2	171.5	193.6
3rd Quarter	166.3	182.9	177.3	
4th Quarter	175.7	190.7	188.4	
% change (2Q/2Q.)	(+17.1)	(+7.7)	(-7.4)	(+12.9)

Source: Based on data from the Canadain Pulp and Paper Association.

Table 20 - Sawn Lumber Production
(million feet, board measure)

Month	1965	1966	1967	1968
January	18.3	18.4	15.4	20.1
February	19.3	20.6	21.3	13.2
March	21.8	22.6	23.5	21.7
April	15.8	15.3	20.2	15.5
May	14.2	17.9	12.8	18.3
June	22.1	26.7	22.0	20.6
July	20.1	25.8	23.7	18.6
August	21.9	27.0	24.2	
September	20.3	17.7	19.5	
October	21.7	21.7	20.9	
November	14.3	16.2	12.6	
December	24.7	17.9	17.5	
Total	234.5	247.8	233.6	
% change (Jan.-July)	(-44.5)	(+11.9)	(-5.7)	(-7.8)

Source: D.B.S. 35-002.

(V) UTILITIES

Table 21 - Net Electric Energy Used*
(million kilowat hours)

Month	1965	1966	1967	1968
January	238	258	290	311
February	226	236	230	296
March	247	258	300	307
April	231	246	271	292
May	239	255	267	299
June	233	248	243	280
July	231	247	254	278
August	235	261	266	
September	238	251	264	
October	260	286	291	
November	252	284	287	
December	254	296	305	
Total	2,884	3,126	3,268	
% change (Jan.-July)	(+24.1)	(+6.3)	(+6.1)	(+11.2)

Source: D.B.S. 57-001.
*This series is based on a sample by the Dominion Bureau of Statistics. Thus the monthly values do not aggregate to the correct annual totals, which may be found in D.B.S. 57-202.

Table 22 - Net Electricity Provided by NBEPC For Consumption
(million kilowatt hours)

Month	1965	1966	1967	1968
January	176	206	246	267
February	187	186	226	246
March	190	200	241	253
April	184	187	227	243
May	177	199	225	242
June	175	191	202	238
July	172	196	213	223
August	179	207	229	249
September	183	207	215	
October	199	226	245	
November	191	230	239	
December	199	233	246	
Total	2,212	2,468	2,754	
% change (Jan.-Aug.)	(+31.1)	(+9.2)	(+15.1)	(+8.4)

Source: The New Brunswick Electric Power Commission.

Table 23 - Long Distance Calls Originating in New Brunswick
(thousands)

Month	1965	1966	1967	1968
January	468	535	620	706
February	443	505	580	653
March	516	572	653	682
April	515	560	617	678
May	551	611	704	748
June	575	637	717	731
July	614	668	753	858
August	632	725	779	865
September	583	660	718	761
October	573	649	721	
November	574	641	697	
December	590	668	717	
Total	6,634	7,431	8,276	
% change (Jan.-Sept.)	(+15.4)	(+11.8)	(+12.2)	(+8.8)

Source: The New Brunswick Telephone Company Limited.

Table 24 - Telephones in Service
(thousands)

Month	1965	1966	1967	1968
January	162	174	185	196
February	163	175	187	197
March	163	175	187	198
April	165	176	188	199
May	166	178	188	201
June	167	179	190	202
July	168	181	191	203
August	169	181	192	203
September	170	182	194	205
October	171	183	195	
November	172	183	195	
December	173	184	195	
% change (Sept./Sept.)	(+6.9)	(+7.1)	(+6.6)	(+5.7)

Source: The New Brunswick Telephone Company Limited.

(VI) CONSTRUCTION

Table 25 - Construction Contracts Awarded*
(thousand dollars)

(A) Total

Month	1965	1966	1967	1968
January	3,715	604	3,772	8,857
February	2,412	1,841	344	217
March	4,192	1,839	5,322	854
April	6,854	545	1,571	3,551
May	3,651	5,797	6,187	2,666
June	10,775	7,809	7,601	10,791
July	4,755	9,438	3,403	5,447
August	6,000	1,382	7,605	2,880
September	5,086	4,152	12,781	
October	2,841	6,583	6,854	
November	3,477	5,900	5,900	
December	1,944	2,737	3,468	
Total	55,702	48,627	64,808	
% change (Jan.-Aug.)	(-26.0)	(-30.9)	(+22.4)	(-1.5)

(B) 1968 Breakdown

Month	Residential	Business	Industrial	Engineering	Institutional
January	990	1,439	-	2,809	3,620
February	38	24	100	-	50
March	164	243	-	-	447
April	1,228	1,230	-	287	907
May	856	1,088	6	267	448
June	1,672	132	206	2,485	6,297
July	1,450	2,268	-	1,469	260
August	240	294	94	1,082	1,171
September					
October					
November					
December					
Total					
% change (Jan.-Aug.)	(+78.4)	(+2.5)	(-73.0)	(-35.1)	(+19.1)

Source: Southam Building Guide.
*Based mainly on a survey of large engineering projects.

Table 26 - Housing Starts and Houses Under Construction (All Areas)
(number)

Quarter	1965	1966	1967	1968
(A) Starts				
1st Quarter	88	258	174	172
2nd Quarter	1,044	853	875	932
3rd Quarter	1,011	782	952	
4th Quarter	686	637	545	
Total	2,829	2,530	2,546	
% change (1Q.-2Q.)	(+33.2)	(-1.9)	(-5.6)	(+5.2)
(B) Under Construction				
1st Quarter	1,215	1,312	997	1,035
2nd Quarter	1,810	1,355	1,375	1,445
3rd Quarter	2,206	1,625	1,806	
4th Quarter	1,901	1,428	1,506	
Total	7,132	5,720	5,684	
% change (1Q.-2Q.)	(+75.9)	(-11.8)	(-11.1)	(+4.6)

Source: D.B.S. 64-002.

Table 27 - Building Permits Issued*
(thousand dollars)

Month	1965	1966	1967	1968
January	1,146	713	1,004	2,098
February	1,894	1,541	436	853
March	5,028	4,937	1,483	5,720
April	3,926	2,769	5,173	4,048
May	3,826	8,819	6,630	6,897
June	5,580	3,000	10,620	
July	29,738	4,239	5,941	
August	5,907	3,811	4,817	
September	5,814	5,937	4,996	
October	5,738	5,096	4,220	
November	2,832	2,041	7,622	
December	1,117	3,024	6,710	
Total	72,546	45,927	59,652	
% change (Jan.-May)	(+31.3)	(+18.7)	(-21.6)	(+33.2)

Source: D.B.S. 64-001.
*Does not cover engineering projects (roads, bridges, dams, etc.) nor non-urban construction.

(VII) TRADE AND FINANCE

Table 28 - Value of Retail Trade
(thousand dollars)

Month	1965	1966	1967	1968
January	37,181	39,829	41,264	45,072
February	35,071	36,933	36,551	42,462
March	44,835	46,917	45,779	47,764
April	47,526	48,792	48,397	50,932
May	49,256	47,629	53,347	60,244
June	48,747	48,795	54,396	56,422
July	50,645	49,736	52,585	57,178
August	43,119	44,855	47,056	
September	44,212	46,634	51,372	
October	49,196	50,864	51,798	
November	49,213	52,599	56,485	
December	59,622	66,607	64,197	
Total	558,623	580,190	603,227	
% change (Jan.-July)	(+10.0)	(+1.7)	(+4.3)	(+8.4)

Source: D.B.S. 63-005.

Table 29 - Consumer Price Index (Saint John)
(1949 = 100)

Month	1965	1966	1967	1968
January	135.5	137.8	143.0	147.7
February	135.6	138.7	143.3	147.9
March	135.9	138.8	143.5	148.3
April	136.1	139.7	144.0	148.8
May	136.4	139.8	143.9	149.3
June	137.6	140.8	144.4	150.0
July	138.0	140.9	144.6	150.9
August	137.8	141.8	145.9	151.4
September	137.5	141.9	145.7	
October	137.1	141.7	145.7	
November	137.6	141.5	145.7	
December	138.2	141.8	146.6	
Average Index	136.9	140.4	144.7	
% change (Aug./Aug.)	(+1.7)	(+2.9)	(+2.9)	(+3.8)

Source: D.B.S. 62-002.

Table 30 - Cheques Cashed in Clearing Houses
(million dollars)

Month	1965	1966	1967	1968
January	289.4	340.3	410.3	412.2
February	290.7	316.6	364.2	374.3
March	317.2	342.9	400.7	411.0
April	324.6	372.9	446.2	404.4
May	320.2	383.3	424.0	452.4
June	315.5	395.6	407.4	404.5
July	325.9	358.4	400.0	
August	352.3	376.4	451.1	
September	348.9	359.4	387.2	
October	308.0	355.4	419.9	
November	337.9	383.1	444.8	
December	345.8	398.4	381.8	
Total	3,876.4	4,382.7	4,937.6	
% change (Jan.-June)	(+14.5)	(+15.8)	(+14.0)	(+0.2)

Source: D.B.S. 61-001.

Table 31 - Number of New Motor Vehicle Sales*

Month	1965	1966	1967	1968
(A) All Vehicles				
January	1,233	1,649	1,284	1,307
February	1,494	1,684	1,044	1,441
March	2,101	2,958	1,790	2,146
April	2,689	2,528	1,975	2,061
May	2,561	2,180	2,507	2,800
June	2,581	1,940	2,293	2,603
July	1,830	1,717	1,569	2,150
August	1,924	1,593	1,612	
September	1,148	1,119	1,252	
October	1,762	1,850	1,602	
November	1,637	1,657	1,588	
December	1,701	2,307	1,319	
Total	22,661	23,182	19,835	
% change (Jan.-July)	(+11.8)	(+1.2)	(-15.0)	(+16.4)

- continued -

Table 31 - (Continued)*

Month	1965	1966	1967	1968
(B) Passenger Vehicles				
January	997	1,338	1,047	1,022
February	1,218	1,424	809	1,172
March	1,781	2,563	1,514	1,794
April	2,320	2,103	1,680	1,764
May	2,183	1,814	2,122	2,331
June	2,108	1,600	1,904	2,150
July	1,477	1,459	1,249	1,752
August	1,601	1,299	1,251	
September	959	947	978	
October	1,503	1,574	1,277	
November	1,323	1,426	1,299	
December	1,406	1,897	1,040	
Total	18,876	19,444	16,170	
% change (Jan.-July)	(+12.2)	(+1.8)	(-16.1)	(+16.1)
(C) Commercial Vehicles				
January	236	311	237	285
February	276	260	235	269
March	320	395	276	352
April	369	425	295	297
May	378	366	385	469
June	473	340	389	453
July	353	258	320	398
August	323	294	361	
September	189	172	274	
October	259	276	325	
November	314	231	289	
December	295	410	278	
Total	3,785	3,738	3,664	
% change (Jan.-July)	(+10.0)	(-2.1)	(-9.3)	(+18.1)

Source: D.B.S. 63-007.

*Data on Value of Motor Vehicle Sales for 1967 are being computed on a new base and are no longer comparable with pre- 1967 data. Therefore, only the Number of Motor Vehicles are shown.

Table 32 - Life Insurance Sales
(million dollars)

Month	1965	1966	1967	1968
January	8.6	8.9	11.0	10.5
February	12.1	13.3	12.7	15.2
March	12.5	12.2	12.4	15.5
April	11.7	12.3	13.1	14.2
May	12.7	13.1	13.3	14.4
June	13.0	12.6	14.9	16.0
July	11.0	11.4	11.5	13.6
August	10.9	11.6	12.0	
September	11.3	13.0	12.2	
October	12.7	14.4	14.8	
November	14.5	14.2	17.2	
December	11.5	13.7	14.6	
Total	142.5	150.7	159.7	
% change (Jan.-July)	(+22.5)	(+2.7)	(+6.1)	(+11.8)

Source: D.B.S. 11-003.

(VIII) TRANSPORTATION AND TOURISM

Table 33 - Total Tourist Car Entries
(number)

Month	1965	1966	1967	1968
June	116,575	131,007	136,292	151,325
July	224,946	258,266	259,452	283,086
August	206,663	232,829	231,384	
September	130,300	141,107	146,137	
Total	678,484	763,209	773,265	
% change (June-July)	(+7.4)	(+14.0)	(+1.7)	(+9.8)

Source: New Brunswick Travel Bureau.

Table 34 - Railway Freight Loaded at Points in New Brunswick
(thousand tons)

Quarter	1965	1966	1967	1968
1st Quarter	1,300.8	1,144.2	1,324.8	1,245.0
2nd Quarter	1,227.0	1,239.5	1,213.5	
3rd Quarter	955.0	1,147.6	1,072.0	
4th Quarter	1,079.3	1,234.8	1,154.5	
Total	4,562.1	4,766.1	4,764.8	
% change (1 Q.)	(+8.9)	(-12.0)	(+15.8)	(-6.0)

Source: D.B.S. 52-002.

Table 35 - Railway Freight Unloaded at Points in New Brunswick
(thousand tons)

Quarter	1965	1966	1967	1968
1st Quarter	1,771.7	1,763.0	1,807.2	1,580.8
2nd Quarter	1,483.4	1,331.1	1,292.3	
3rd Quarter	1,018.2	1,137.2	1,051.3	
4th Quarter	1,173.3	1,271.3	1,180.7	
Total	5,446.6	5,502.6	5,331.5	
% change (1 Q.)	(+4.2)	(-0.5)	(+2.5)	(-12.5)

Source: D.B.S. 52-002.

Table 36 - Total Port Traffic - Saint John Harbour
(thousand cargo tons)

Month	1965	1966	1967	1968
January	725.2	723.5	813.6	694.5
February	738.8	730.8	550.3	585.6
March	749.4	825.2	828.2	769.5
April	425.3	462.9	444.1	528.8
May	357.4	448.7	386.8	378.7
June	504.7	433.4	394.3	437.4
July	394.0	459.4	367.9	384.9
August	416.2	473.6	400.7	431.2
September	382.9	447.7	316.0	
October	432.9	329.7	441.1	
November	441.8	542.5	458.8	
December	546.4	591.2	503.6	
Total	6,115.0	6,468.6	5,905.4	
% change (Jan.-Aug.)	(-1.6)	(+5.7)	(-8.2)	(+0.6)

Source: National Harbours Board, Port of Saint John.

Table 37 - Port Traffic - Saint John Harbour
(thousand cargo tons)

Month	Incoming Traffic			Outgoing Traffic		
	1967	1968	% Change	1967	1968	% Change
January	337.6	425.2	+25.9	476.0	269.3	- 43.4
February	219.1	236.0	+ 7.7	331.2	349.6	+ 5.6
March	378.4	439.1	+16.0	449.8	330.4	- 26.5
April	278.7	278.0	- 0.3	165.4	250.8	+ 51.6
May	251.6	241.7	- 3.9	135.2	137.0	+ 1.3
June	238.2	316.9	+33.0	156.2	120.5	- 22.9
July	220.6	293.8	+33.2	147.3	91.1	- 38.2
August	285.0	334.1	+17.2	115.7	97.1	- 16.1
September	230.2			85.8		
October	336.4			104.7		
November	300.5			158.3		
December	278.7			224.8		
Total	3,355.0			2,550.4		
% change (Jan.-Aug.)	(-1.0)	(+16.1)		(-8.0)	(-16.7)	

Source: National Harbours Board, Port of Saint John.

REGIONAL INDEXES

Office of the Economic Advisor
Province of New Brunswick
September, 1968

OUTLINE

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INTRODUCTION

During the space of the past three years, the staff of the Office of the Economic Advisor has devoted considerable time and effort to develop a set of tools for regional economic analysis. Such tools, it was felt would indicate the areas within the Province which were growing most rapidly and those areas which were growing less rapidly. They would thus be extremely useful in evaluating the effect of various government programs.

The first step taken in this direction consisted of obtaining a measure of economic growth for the Province. A method of computing Gross Provincial Product was developed and was published in the June 1966 issue of this Quarterly. Subsequently, a method was developed for obtaining an up-to-date estimate of G.P.P.

The second step taken was the division of the Province into economic regions. The choice of regions and the reasons for their choice was written up and published in the September, 1967 issue of this Quarterly. Originally, there were six regions. Subsequently, they were reduced to five. Charlotte County was felt to be too small to be considered a separate region. It was decided to include it with the St. John Region

rather than the Fredericton Region because it would seem that the future of the County is more closely linked to St. John than to Fredericton.

The third step taken was the development of regional indicators of economic activity. At first, it was hoped that it would be possible to compute gross product figures at the subprovincial level, because this would allow comparison of one region with another in absolute terms. This hope was abandoned relatively early in the exercise and it was decided to settle for regional indexes. These have been developed and, although the method for computing them still requires refinement, they are presented in this issue of the Quarterly.

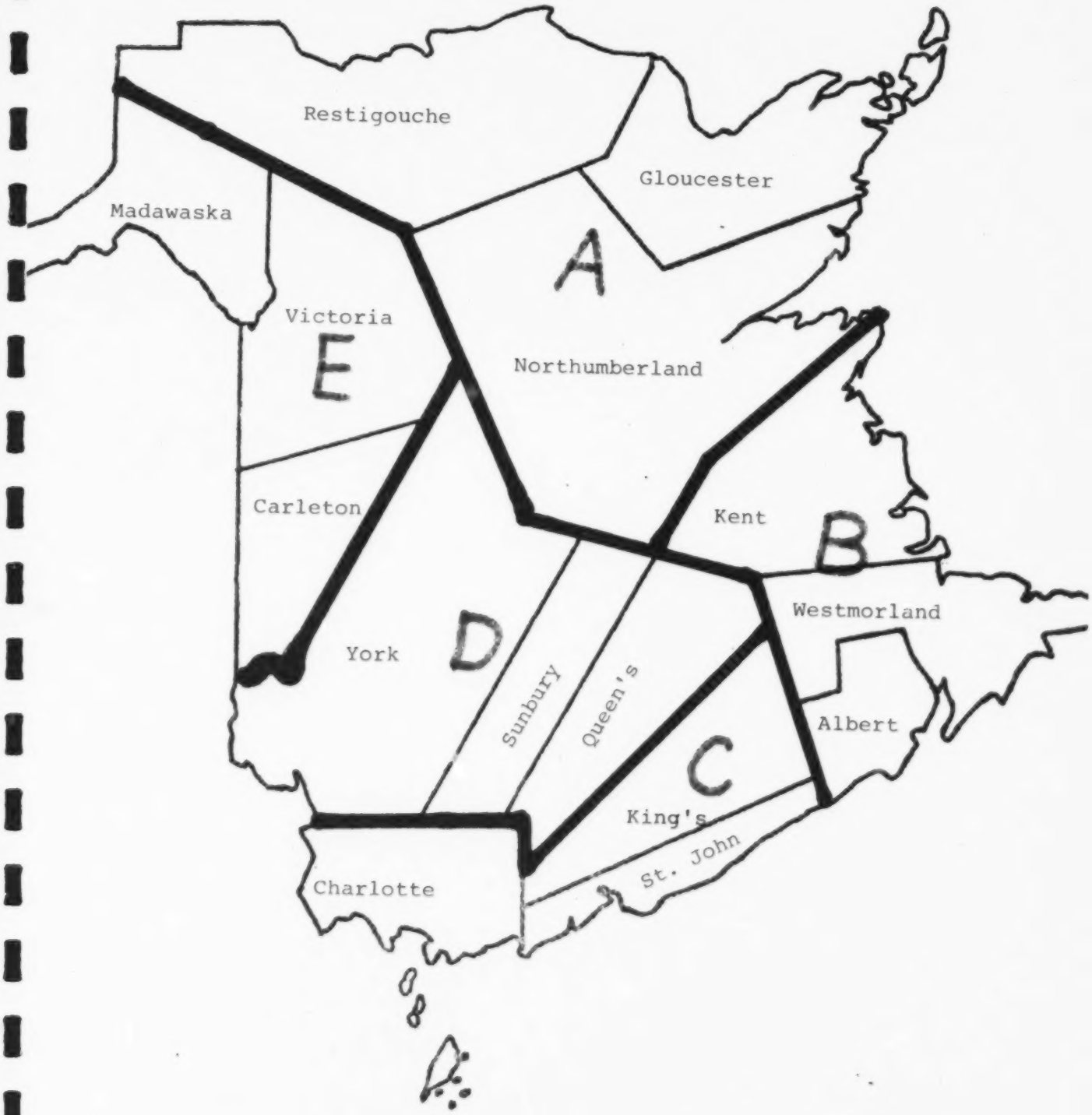
THE REGIONS

Figure 1 and the list below define the five regions and their constituent counties. The choice of names for the regions is not a happy one, but it was deemed better than simply numbering them.

Region	Constituent Counties
Northeast (A)	Restigouche Gloucester Northumberland

FIGURE I

The Economic Regions of New Brunswick



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Region	Constituent Counties
Moncton (B)	Kent Westmorland Albert
Saint John (C)	King's St. John Charlotte
Fredericton (D)	Queen's Sunbury York
Upper St. John River (E)	Carleton Victoria Madawaska

DERIVATION OF THE INDEX

Inputs

The first concern in devising a function of several time series is to find series which are available on the required geographical area. In this case, the availability of such data was one of the criteria used to determine the regions. Hence there was no problem.

Six series available to the O.E.A. were felt to have properties making them more representative of economic activity than others. It was decided to use only three of these series because this would considerably ease the burden of calculation

without reducing the final accuracy substantially. If the method were found to work for three series, increasing the number of series later on would only improve it slightly.

The six series judged most valuable are listed below:

a) Liquor Sales,
b) Electric Power Consumption,
c) Retail Sales Tax,
d) Telephone Billings,
e) Value of Agricultural Production,
f) Value of Fish Landings.

Of these, the first three were used to develop the indexes found in this report. As soon as computer time is available and a program can be written, it is proposed to extend the index to include Telephone Billings. Eventually, it is also hoped to include the other two series, along with any other series which seem pertinent.

There are various problems with the data, but it is expected that they can be ironed out. The retail sales tax base has changed from time to time, as has the rate at which the tax is levied. A further limitation of this series results from the fact that several establishments have a central office or distribution centre through which all sales for the Province are reported.

With respect to electric power consumption, it was necessary to decide whether it was more important to retain

the accuracy of statistics from the New Brunswick Electric Power Commission or to include sometimes sketchy private figures as well. In the end, it was decided to use only the N.B.E.P.C. figures.

Figures on gross sales of wine, beer and spirits were expected to pose little in the way of data problems. This expectation has seemed somewhat presumptuous in view of the current liquor strike in Quebec. It is expected, however, that it will be possible to make adjustments for such outside influences.

The analysis was held to these three variables for one reason only. The increase in calculations involved in moving from three variables to four is astronomical. The computerizing of the formulae should enable us to extend the index to cover several functions and to drop other functions when it is felt that they are being strongly influenced by non-economic factors.

Assumptions

There are several assumptions in the method used. The main ones are discussed in this section. The first assumption, that the input data is reliable, has been discussed above. The remainder of the assumptions are discussed below.

Perhaps the most important assumption is that the New Brunswick Gross Provincial Product figures are accurate. Since errors in the G.P.P. are not measurable, it was decided to accept this assumption. Furthermore, work is currently underway at the Dominion Bureau of Statistics in the field or regional accounts, so that a G.P.P. estimate with a quantifiable error should be available within the next few years.

Another major assumption is the existence of a function of several variables which is a good estimator of G.P.P. A further requirement is that this function shall use as inputs only those series which are available for the regions as well as the Province. The variety of possible types of function is large and a degree of arbitrariness was required to reduce the number of possibilities. Because of this arbitrariness, it is necessary to revise the coefficients of the function on a regular basis.

The fourth major assumption is that the function derived for the Province will apply with equal validity to each of the regions.

Finding a Function

Two basic types of function were selected for trial, primarily because of their simplicity. The first form tried

was linear, of the form:

$$I = t_1 x_1 + t_2 x_2 + t_3 x_3 + \ldots + t_n x_n$$

After several attempts with different sets of variables it was found that coefficients could not be found to give a satisfactory result.

This function is very closely related to a weighted arithmetic mean. It has a parallel in the geometric mean. Instead of coefficients the function has exponents/or damping factors. The result is a function with the general form:

$$I = A x_1^{t_1} \; x_2^{t_2} \; x_3^{t_3} \; \ldots \; x_n^{t_n}$$

By converting this equation to its logarithmic form the method of solution becomes identical to the solution of the linear function.

This form gave suitable results. An examination was made of the differences between the index calculated for the Province and G.P.P. for the corresponding years. By making slight adjustments in the coefficients it was possible to bring the function very closely in line with G.P.P. The results obtained from this form of equation are shown in the charts and tables at the end of the article.

REGIONAL COMPARISONS

It is not within the terms of reference of this article to include any regional analysis. However, a short section comparing growth rates among the regions would seem to be in order. It should be borne in mind that the discussion refers to rates of growth and not to absolute growth. The comparison is for the period 1955 to 1966.

During this period, the northern half of the Province grew at a substantially more rapid rate than the southern half. The rate of growth in the Northeast Region equalled or exceeded the rate of growth in the Province in all but two years, with especially strong growth occuring in 1964, 1965 and 1966. The growth rate of the Upper Saint John River Valley Region was exceeded by the Provincial growth rate in only four years.

Growth in the Fredericton Region was at a rate approximately equal to the rate of growth of the Province. Growth in this Region was relatively steady, with year-to-year variations fairly small. The range in growth rates varied from 3 percent to 10 percent.

Growth in the Moncton Region was slightly below the Provincial rate, while growth in the Saint John Region was well below the Provincial rate.

Table 1

REGIONAL INDEXES OF ECONOMIC ACTIVITY

(1955 = 100)

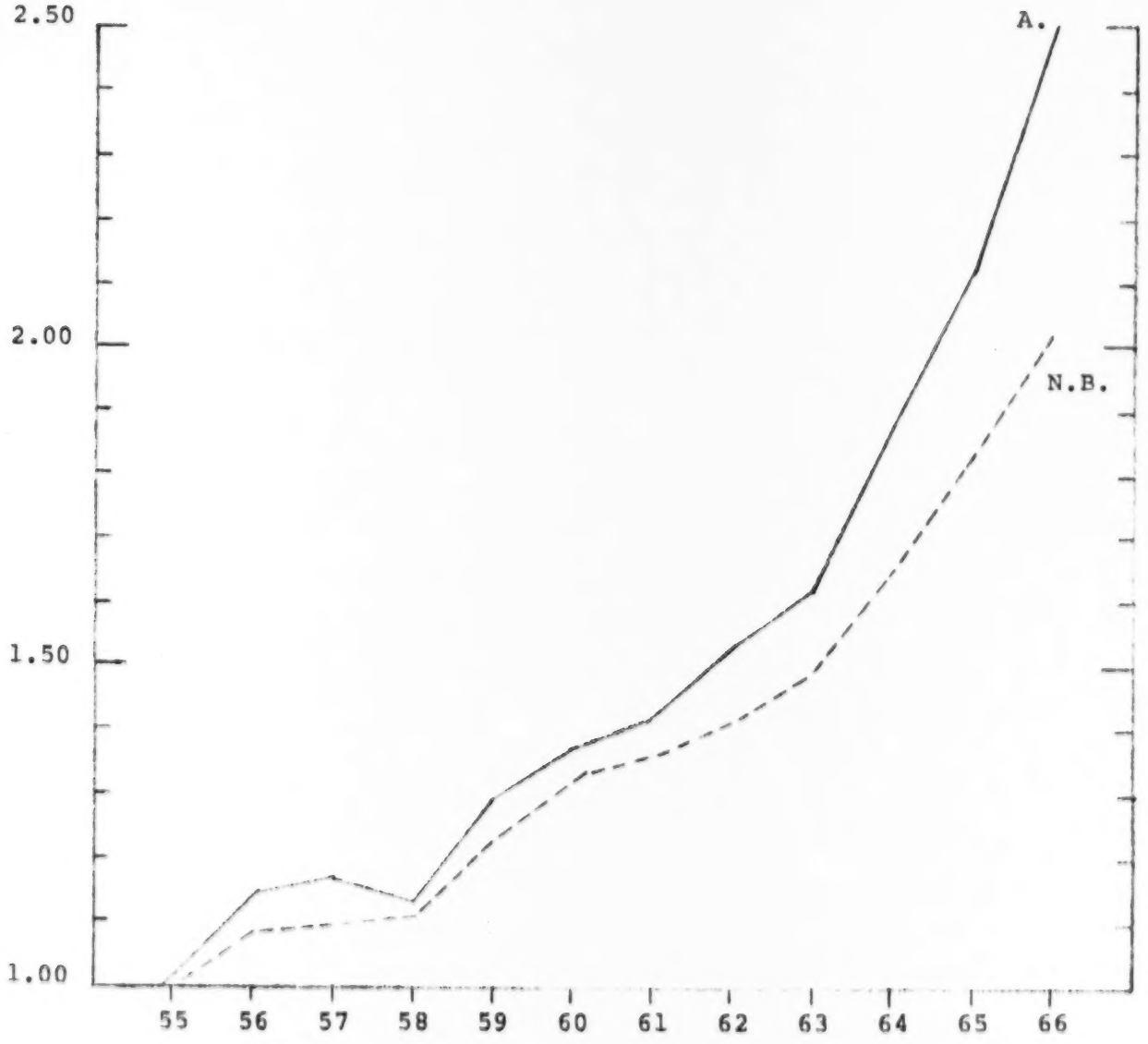
Year	A	B	C	D	E	N. B.
1955	100	100	100	100	100	100
1956	114	107	103	108	112	108
1957	117	111	99	114	117	109
1958	111	115	103	121	121	111
1959	129	127	110	131	133	123
1960	137	132	119	135	144	132
1961	142	138	120	143	148	136
1962	153	145	124	154	151	142
1963	162	147	128	161	154	149
1964	188	161	138	177	188	165
1965	212	180	144	194	224	183
1966	249	191	157	206	230	202

Table 2

ANNUAL PER CENT CHANGE IN INDEX

Year	A	B	C	D	E	N. B.
1955	-	-	-	-	-	-
1956	1.15	1.07	1.03	1.08	1.12	1.08
1957	1.02	1.04	.959	1.05	1.06	1.01
1958	.946	1.03	1.04	1.06	1.03	1.02
1959	1.16	1.11	1.06	1.07	1.10	1.11
1960	1.06	1.04	1.08	1.03	1.08	1.07
1961	1.04	1.04	1.01	1.05	1.03	1.03
1962	1.08	1.05	1.03	1.08	1.02	1.05
1963	1.05	1.02	1.04	1.05	1.02	1.05
1964	1.16	1.09	1.07	1.10	1.22	1.11
1965	1.13	1.12	1.04	1.10	1.19	1.11
1966	1.17	1.06	1.09	1.06	1.03	1.10

INDEXES OF ECONOMIC GROWTH
Northeast Region (A)
and
New Brunswick (N.B.)
(1955 = 100)



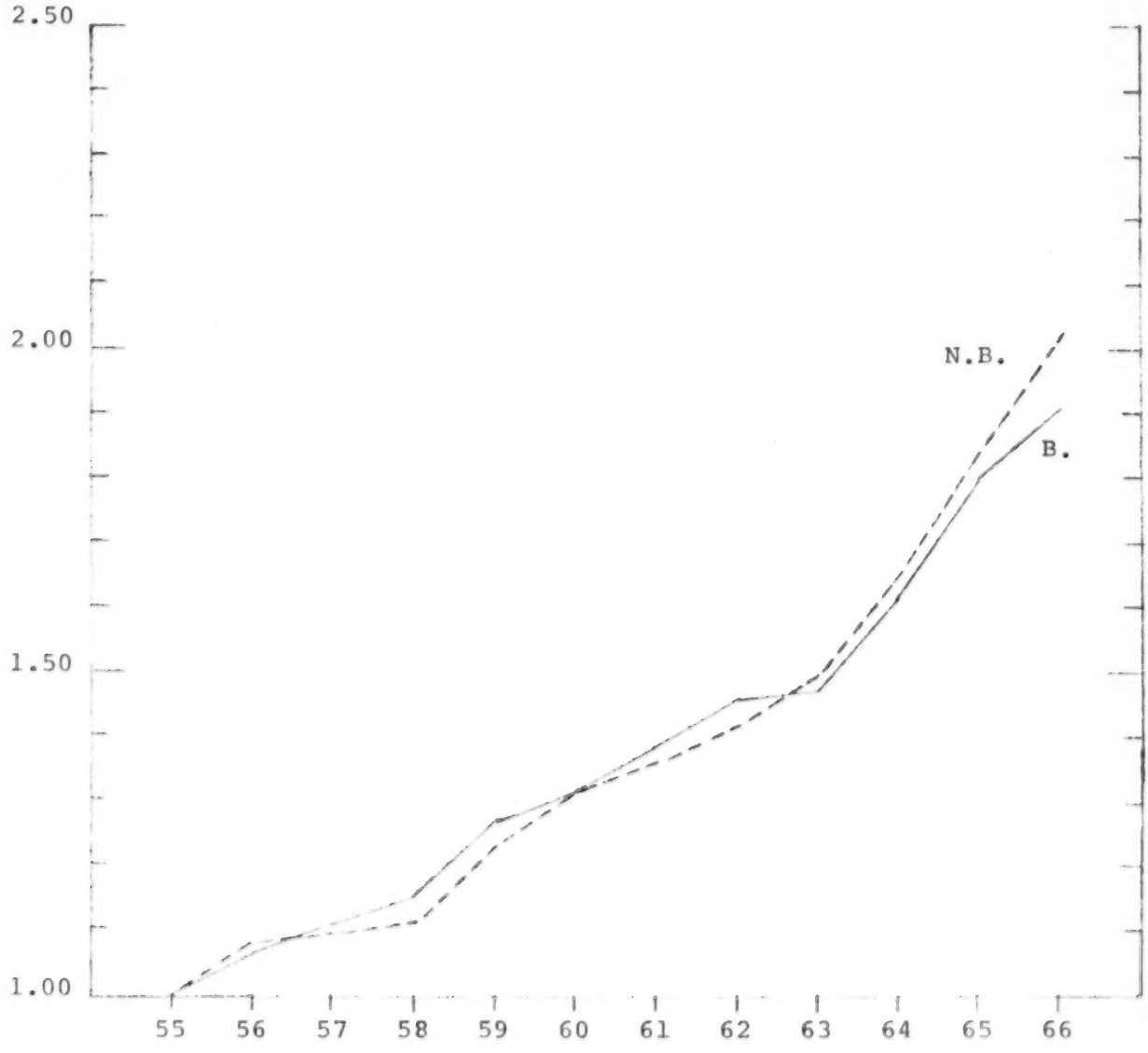
INDEXES OF ECONOMIC GROWTH

Moncton Region (B)

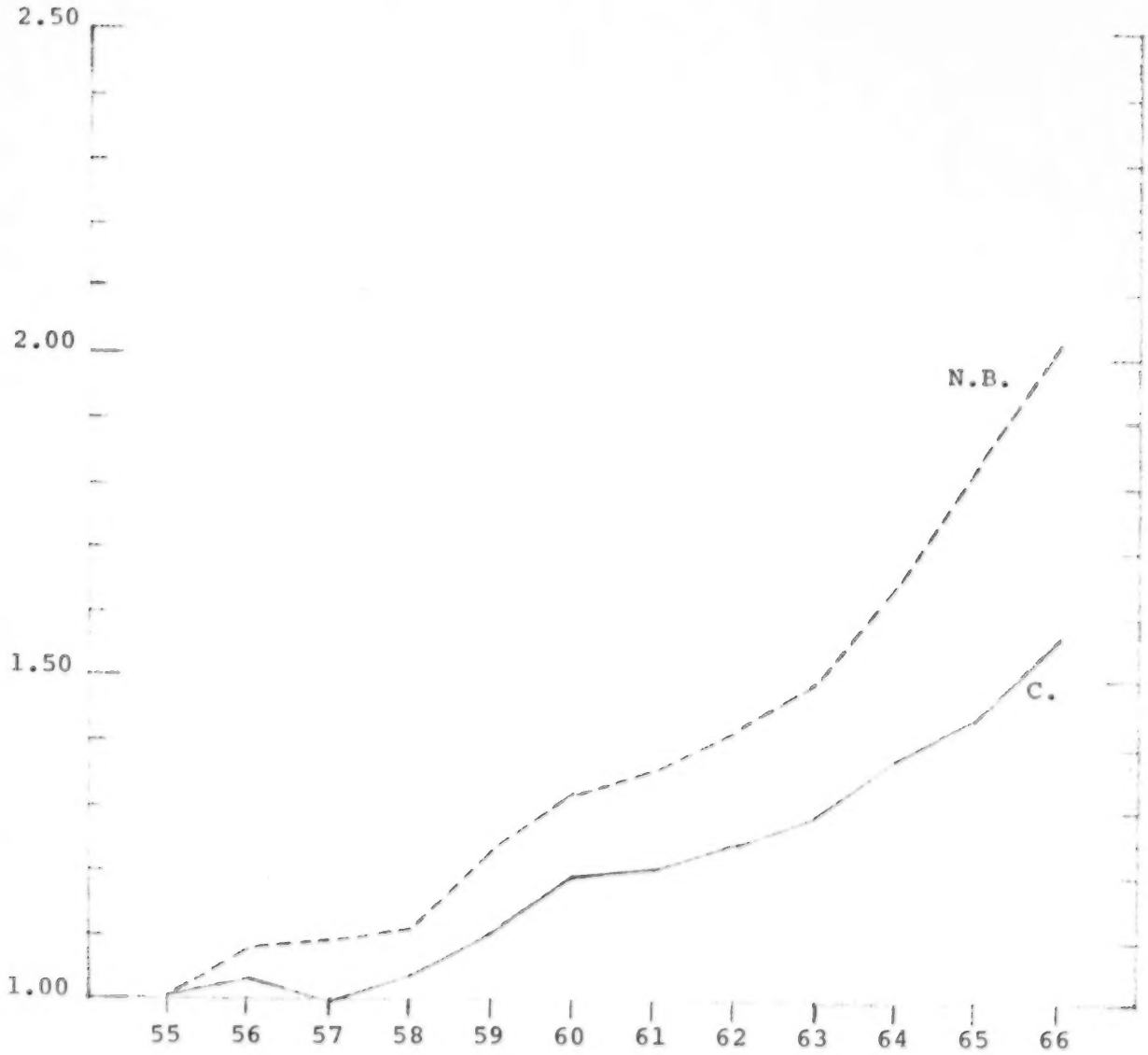
and

New Brunswick (N.B.)

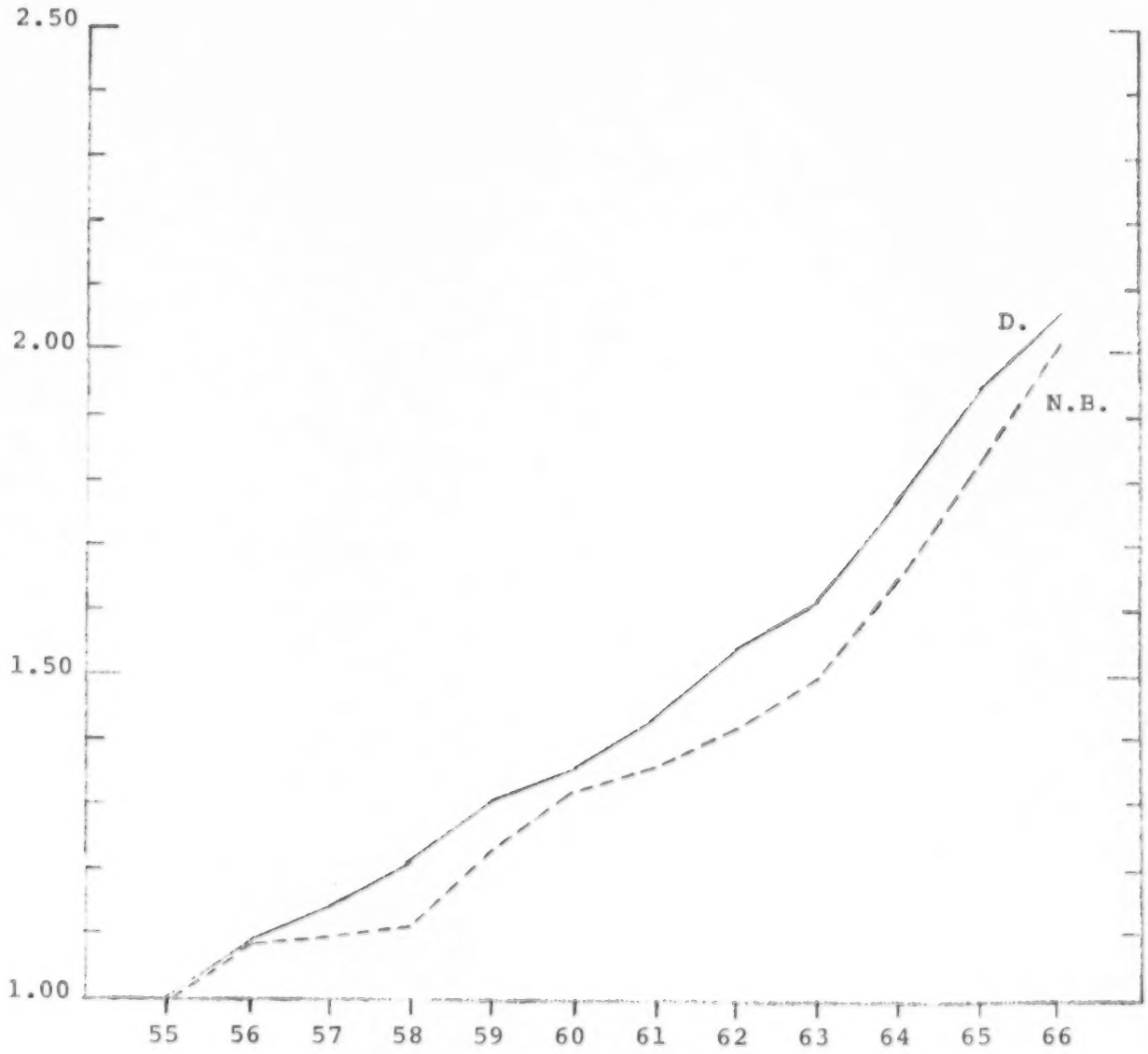
(1955 = 100)



INDEXES OF ECONOMIC GROWTH
Saint John Region (C)
and
New Brunswick (N.B.)
(1955 = 100)



INDEXES OF ECONOMIC GROWTH
Fredericton Region (D)
and
New Brunswick (N.B.)
(1955 = 100)



INDEXES OF ECONOMIC GROWTH
Upper St. John River Region (E)
and
New Brunswick (N.B.)
(1955 = 100)